True/False

Indicate whether the sentence or statement is true or false.

___ 1. Both parties gain in a voluntary exchange.
___ 2. It is impossible for both nations to gain when trading with one other.
___ 3. Opportunity cost is the value of the next best alternative to a given choice.
___ 4. The United States is the largest national economy in the world.
___ 5. The factors of production include all goods and services produced in an economy.
___ 6. In the United States, all property is privately owned.
___ 7. Scarcity is the fundamental problem of the economy.
___ 8. Millionaires do not face the problem of scarcity.
___ 9. Economists use the term capital to describe that factor of production that includes human-made resources such as factories, buildings, machinery and tools.
___ 10. In the Wealth of Nations, Adam Smith wrote about how countries could increase their consumption of goods and services through specialization and trade with other countries.
___ 11. A market system is not considered an effective way of controlling self-interest.
___ 12. Karl Marx was critical of markets on the grounds that they are not efficient.

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

___ 13. Rational choice requires that opportunity cost be
   a. ignored in making a decision.
   b. considered for individual choices, but not for societal choices.
   c. computed, but not actually used in making a decision.
   d. considered as part of making a decision.
   e. used as the sole decision criterion.

___ 14. To an economist, the cost of a college education
   a. includes the income that the student could have earned during the time spent in college.
   b. can be measured solely by the dollar cost of tuition, books, and other fees.
   c. includes only the cost of schooling, not the cost of housing and food.
   d. excludes financial aid in computation of the cost of schooling.
   e. All of the above are correct.

___ 15. Which person has the highest opportunity cost of obtaining a college degree (assuming that attending college requires giving up his or her current position)?
   a. Bill, who is unemployed.
   b. Jane, who is an unwed mother and earns $15,000 a year.
   c. Larry, who is a technician in the Navy earning $18,000 a year with free food and housing.
   d. Mary, who has a job earning $60,000 a year as a computer programmer.
   e. Unable to determine from the data given.

___ 16. Throughout the 1980s, accounting departments in U.S. universities were unable to fill many available faculty positions. This fact suggests that the salaries offered by these departments
a. suffered from the cost disease of the service sector.
b. were below the market price for qualified accountants.
c. created externalities.
d. failed to reflect productivity growth in teaching.

17. When economists are critical of government regulations that prohibit free individuals from making certain kinds of contracts, for example, to purchase a good or service, they will usually invoke the concept of
a. marginal analysis.
b. mutual gains from voluntary trade.
c. inflation-unemployment trade-off.
d. the need for abstraction.
e. externalities.

18. Economists use models in order to
a. experiment with alternative circumstances.
b. make educated guesses about real life events.
c. predict outcomes under various hypothetical conditions.
d. increase understanding of how a relationship actually works.
e. All of the above are correct.

Figure 1-1

19. The slope of the line in Figure 1-1 is
a. 0.5.
b. 2.0.
c. -0.5.
d. -2.0.

20. A horizontal line has a slope of
a. one.
b. zero.
c. infinity.
d. undefined.

21. A vertical line has a slope of
a. infinity.
b. zero.
c. undefined.
d. 1,000.

22. Which of the following is true about the United States?
a. There has only been one recession in U.S. history.
b. There have been recessions every couple of years throughout U.S. history.
c. Recessions have never occurred in the United States.
d. Recessions have occurred periodically in U.S. history.
e. Recessions in the United States have generally been worse than in other countries.

23. One of the most important changes in the composition of the labor force in the United States has been
24. Most American workers
   a. are employed in the goods-producing sector.
   b. are employed by government.
   c. are employed in the service-producing sector.
   d. are employed in the agricultural sector.

25. In 2003, the ____ sector employed more people than the ____ sector.
   a. manufacturing, service
   b. service, manufacturing
   c. federal government, service
   d. federal government, state and local government

26. Economics is the study of the logic of
   a. rational decisions.
   b. decision-making activities.
   c. ends and means.
   d. choosing options from those available.
   e. All of the above are correct.

27. Which of the following quotations best captures the idea of opportunity cost?
   a. "Opportunity knocks but once."
   b. "Every choice involves a sacrifice."
   c. "Let's not ask for the moon; we have the stars."
   d. "Fools rush in where wise men fear to tread."
   e. "All that glitters is not gold."

28. Opportunity cost is best defined as the value of
   a. all of the other possible options that the decision maker could have chosen.
   b. the alternative which the decision maker would choose if more resources were available.
   c. what is gained from the alternative which is chosen.
   d. resources that are given up to obtain the alternative that is chosen.
   e. the next best alternative that the decision forces one to give up.

29. The divergence between money costs and opportunity costs is the least in which of the following situations?
   a. China uses millions of otherwise unemployable workers to build roads with picks and shovels.
   b. Wilhelm, an engineer at Exxon, is drafted—his army salary is $300 per month.
   c. Colleen quits her job to stay at home and raise her children.
   d. A university, using a private contractor, builds a field house on land it purchased at full market value from a local farmer.

Figure 3-1
30. According to Figure 3-1, the opportunity cost of one more bushel of wheat is
   a. higher at B than at D.
   b. lower at B than at D.
   c. equal at B and D.
   d. impossible to determine from the information given.

31. The shape of the production possibilities frontier in Figure 3-1 implies that
   a. some resources are better suited for producing wheat than for producing barley.
   b. the opportunity cost of producing more wheat falls as wheat production rises.
   c. the farmer's technology is not subject to the principle of increasing costs.
   d. the financial cost of producing wheat is higher than the financial cost of producing barley.

**Table 3-2**

<table>
<thead>
<tr>
<th>Combination</th>
<th>Cotton</th>
<th>Corn</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>B</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>C</td>
<td>21</td>
<td>13</td>
</tr>
<tr>
<td>D</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>E</td>
<td>24</td>
<td>5</td>
</tr>
</tbody>
</table>

32. From the data given in Table 3-2, the opportunity cost of increased cotton in moving from A to B is
   a. 16 units of corn.
   b. 31 units of corn.
   c. 15 units of corn.
   d. 4 units of corn.
   e. 1 unit of corn.

33. In Table 3-2, from point C, the opportunity cost of 3 more units of cotton would be
   a. 4 units of corn.
   b. 8 units of corn.
   c. 14 units of corn.
   d. 16 units of corn.

34. All of the points inside a production possibilities frontier are ____; all of the points outside the production possibilities frontier are ____.
   a. efficient, inefficient
   b. optimal, irrational
   c. attainable, unattainable
   d. rational, zero-cost
   e. unattainable, efficient
35. In Figure 3-2, the production possibilities frontier has a bowed-out shape because of the law of
   a. decreasing costs.
   b. increasing costs.
   c. demand.
   d. comparative advantage.

36. In Figure 3-2, a point such as E
   a. is not obtainable.
   b. is an efficient use of resources.
   c. represents an inefficient allocation of resources.
   d. indicates that the society is a capitalist society.

37. In Figure 3-6 assume this economy is currently operating at point D. What is the opportunity cost of moving to B?
   a. about 200 bushels of wheat
   b. 200 bushels of soybeans
   c. Infinite, B cannot be produced at any cost.
   d. 0

38. When a demand schedule is drawn as a graph,
   a. price is measured on the vertical axis.
   b. quantity is measured on the horizontal axis.
   c. the resulting curve has a negative slope.
d. the other variables (besides price and quantity) are held constant.
e. All of the above are correct.

**Figure 4-2**

---

___ 39. If the government has stated that it will buy any amount of good X offered at $30, which demand curve in Figure 4-2 is appropriate?

- a. 1
- b. 2
- c. 3
- d. 4

___ 40. Each point on the demand curve is

- a. demand for the product.
- b. a quantity demanded at that price.
- c. the amount that people want to buy.
- d. the amount people want to buy at different income levels.
- e. All of the above are correct.

___ 41. In late 1995 and early 1996, the Federal Reserve System reduced interest rates, the price which borrowers pay. As a result, economists expected the quantity of money demanded to

- a. increase.
- b. decrease.
- c. not change.
- d. not change, although the demand schedule itself will shift outward.

___ 42. If price rises, what happens to supply for a product?

- a. It increases.
- b. It decreases.
- c. It does not change.
- d. Uncertain-economic theory has no answer to this question.

___ 43. If price rises, what happens to quantity supplied for a product?

- a. It increases.
- b. It decreases.
- c. It does not change.
- d. Quantity supplied is constant, but supply increases.

___ 44. A shift in the supply curve of bicycles resulting from higher steel prices will lead to

- a. higher prices of bicycles.
- b. lower prices of bicycles.
- c. a shift in the demand curve for bicycles.
- d. larger output of bicycles.
- e. no change in the price of bicycles.

**Figure 4-11**
45. The Russian government has restricted sugar availability to reduce the supply of illegal liquor (sugar is used to increase alcohol content). Russians also like to sweeten their tea with jam, another sugar product. Which graph in Figure 4-11 depicts the impact of sugar rationing on the Russian tea market?

a. 1  
b. 2  
c. 3  
d. 4

**Figure 4-12**

46. The silverware industry has been in serious decline since the 1980s. Family dining habits are less formal so people purchase less silverware. Also, in 1979-1980, the price of silver increased from $5 to $21 per ounce. Which graph in Figure 4-12 best illustrates these developments?

a. 1  
b. 2  
c. 3  
d. 4

47. Studies at Cornell University revealed that chickens grow 2 percent larger when a red mitten is placed in their cage and Vivaldi is played in the coop. Resultant feed savings are estimated at $60 million a year. In the chicken market, the

a. demand curve shifts to the right.  
b. supply curve shifts to the right.  
c. price will rise.  
d. quantity sold will fall.

48. In 1989, Hurricane Hugo devastated Charleston, South Carolina, leaving residents with no electricity for light or refrigeration, and completely cut off from the outside world by fallen trees and washed-out roads. Consequently, the price of ice rose 1,000 percent and generators 300 percent. Tree removal firms were charging $4,000 to cut up a single tree. Outraged, the city government enacted an emergency law prohibiting price "gouging." This law is an example of

a. the cost disease of services.
b. a price ceiling.
c. the laissez-faire rule.
d. the indispensable necessity syndrome.

49. Which of the following will tend to occur if price controls are imposed on a product?
   a. persistent shortages
   b. illegal markets
   c. illicit channels of distribution
   d. industry investment slows or stops
   e. All of the above are correct.

50. In an attempt to reduce poaching of elephant tusks for ivory, officials in Kenya burned illegally gathered ivory. Economists tend to point out that
   a. poaching can be reduced with price supports for ivory.
   b. the supply of ivory has fallen, leading to an increase in price and reward for poaching.
   c. burning ivory decreases demand, leading to lower prices and reward for poaching.
   d. the demand for ivory is higher, leading to an increase in price and reward for poaching.
   e. burning ivory raises demand, and controlled prices will lead to even greater poaching.

51. What is the economic reasoning behind the proposal to legalize drugs?
   a. Legal drugs will greatly increase the supply, which will reduce the price Americans pay to foreign producers of the drugs.
   b. All forms of government restrictions on behavior are immoral, and ought to be removed.
   c. Legal drugs will be much cheaper than illegal drugs, which will reduce incentive for crime to obtain money for drugs and to protect drug "businesses."
   d. Legal drugs will be more expensive than illegal drugs, and the market system will encourage more production, thus lowering the price.
   e. Dealing with supply is always easier than dealing with demand, and legalization accomplishes that.

52. How do macroeconomists differ from microeconomists?
   a. the basic tools of analysis
   b. the underlying principles
   c. the use of abstractions and models
   d. the problems studied
   e. All of the above are correct.

53. The aggregate demand curve shows the quantity of domestic product
   a. produced at each possible price level.
   b. demanded and produced at each possible price level.
   c. that is exported at each possible price level.
   d. demanded at each possible price level.

54. If aggregate demand shifts inward over a long period of time, with aggregate supply held constant, the economy should experience
   a. unemployment.
   b. recession.
   c. stagflation.
   d. inflation.
   e. budget surpluses.

55. Gross Domestic Product is calculated by adding together
   a. the number of goods and services produced in the economy.
   b. money value of final goods and services.
   c. number of workers employed in national production.
   d. all commodities but not services produced in the economy.

56. Which of the following is included in GDP?
   a. the value of illegally produced goods
b. the value of housework by a stay-at-home dad

c. the value of volunteer work done at a local homeless shelter

d. the cost of government-provided social services

57. In 2001, Richard buys a 1993 Chevrolet van from a neighbor. Will this be counted in the GDP for 2001?

a. Yes
b. No
c. Yes, if sales tax is paid
d. No, because the purchase was from an individual not a dealer

Figure 5-1

58. Figure 5-1 plots potential and real output for a hypothetical economy. Based on this graph, the recession occurred

a. between years 1 and 2.
b. between years 2 and 3.
c. between years 3 and 4.
d. after year 4.

59. In *The General Theory of Employment, Interest, and Money*, Keynes rejected the idea that

a. a capitalist economy always gravitates toward high levels of employment.
b. budget deficits necessarily cause recessions and inflation.
c. the ultimate breakdown of the capitalist system is inevitable.
d. international trade always helps to achieve economic stability.

60. According to Keynes, an optimistic outlook causes consumers and businesspersons to _____, and a recession could occur.

a. increase planned investment
b. decrease planned spending
c. increase exports
d. decrease imports
e. decrease saving

61. The Great Depression of the 1930s led to a revolution in macroeconomic thinking, following the work of

b. Milton Friedman.
c. Adam Smith.
d. John Maynard Keynes.
e. David Ricardo.

62. If part of the labor force is unemployed, the foregone goods and services are
a. lost until the unemployed find jobs.
b. are replaced by unemployment insurance.
c. are lost forever.
d. are replaced by an equal amount of imports.

63. As the unemployment rate rises,
   a. real GDP also rises.
   b. nominal GDP rises.
   c. the employment rate rises.
   d. lost national output rises.

64. Someone who is out of work because they are between jobs is experiencing
   a. frictional unemployment.
   b. structural unemployment.
   c. seasonal unemployment.
   d. cyclical unemployment.

65. One of the factors contributing to the existence of frictional unemployment is
   a. automation.
   b. labor union strikes.
   c. occupational mobility.
   d. falling real GDP.

66. Structural unemployment may be particularly severe for
   a. younger workers
   b. college graduates.
   c. older workers.
   d. workers with "high tech" skills.

67. The reason that inflation rarely harms workers is that
   a. wages rise at the same time prices rise.
   b. wages fall when prices rise.
   c. nominal income falls as prices rise.
   d. the minimum wage rate automatically rises when the price level rises.

68. Since 1948, the history of real wage rates shows that
   a. prices and wages have risen at the same rate.
   b. prices have risen at a slower rate than wages.
   c. prices have risen faster than wages.
   d. real wages have remained constant over the period.

69. Which of the following groups would most likely be harmed by inflation?
   a. workers
   b. borrowers
   c. debtors
   d. retirees

70. Which of the following groups would most likely to benefit from inflation?
   a. borrowers
   b. lenders
   c. creditors
   d. pensioners

71. The economic benefits of owning a home are greater when home prices are
   a. falling and interest rates are high.
   b. rising and interest rates are low.
   c. rising and interest rates are high.
   d. falling and interest rates are low.

72. The federal government collects taxes on
a. real capital gains.
b. nominal capital gains.
c. real capital losses.
d. nominal capital losses.

73. If you purchased shares of common stock in 1990 for $1,000 and sold them for $2,000 in 2001 you would be liable for taxes on
a. $2,000.
b. $1,000 less the rate of inflation.
c. $1,000.
d. $2,000 less the rate of inflation.

Essay

74. Harry Truman is credited with the statement, "Give me a one-armed economist," because economists are likely to say, "On the one hand, . . . on the other hand." Why do economists "waffle" more than physicists or chemists?

75. In the early 1800s, there was a smallpox outbreak in a remote part of Russia. The government sent in a large group of army doctors, but they were too late to stop the epidemic. Thirty years later, there was another smallpox scare. A local statistician cautioned the government against a similar response, noting the increased mortality and high number of army doctors during the earlier epidemic. Was the statistician providing good advice?

76. The U.S. economy is the largest in the world. What two factors primarily explain this? What makes the U.S. economy unique?

77. Between 1959 and 2004 U.S. GDP, measured in dollars of constant purchasing power, expanded about 4.4 times. However, the standard of living only increased by 2.7 times over this period. Explain the difference.

78. List five major economic activities of government, and give an example of each.

79. A nation's citizens often dislike the economy's distribution of income. Explain two methods for creating a more equal distribution of income.

80. Carefully define the following terms and explain their importance to the study of economics.
   a. resources
   b. rational decision
   c. scarcity
   d. opportunity cost
   e. economic growth

81. President Bill Clinton assigned his wife to the task of developing a national health insurance plan to increase the availability of medical care for the poor. How would one determine the opportunity cost of the proposal?

82. Why might the money price for something be higher than the opportunity cost? Why might it be lower? Give an example of each to illustrate your answer.

83. Baumol and Blinder state: "Few bother to think about what makes Florida oranges show up daily in South Dakota supermarkets." But the people of South Dakota are likely to think a great deal about this. Why does someone take the time and energy to assure that oranges which are grown in Florida move more than 1,000 miles before they appear on grocery shelves?

84. After Hurricane Andrew hit Florida and Louisiana, consumers expressed outrage at the high prices being charged for chainsaws, generators, and bottled water. If governments followed the consumers' demands and imposed price ceilings in these markets, what is the likely result?

85. What is Gross Domestic Product? What is included in this statistic? What is excluded? Give two examples of goods or services that are included in GDP and two examples of goods or services that are excluded.
86. Which of the following items are included in GDP? For those items not included, explain why they are not included in GDP.
   a. Jane buys newly issued shares of stock in Macro.com, Inc.
   b. Ross buys a new pair of jeans at a local department store.
   c. Joey has his mustache trimmed at his hair salon.
   d. Rachel buys an antique chest at a resale shop.
   e. Monica makes her own pasta sauce in her apartment.
   f. Phoebe grows her own herbs on her apartment balcony.
   g. Michael travels to Austria and buys wine and cheese.

87. Define and distinguish between real and nominal GDP. Explain why the distinction is important to economists.

88. During the course of the twentieth century, the average workweek in the United States has gotten shorter and Americans have enjoyed greater amounts of leisure time. How has this development affected potential GDP and labor productivity?

89. How is the unemployment rate calculated? Describe the three principal types of unemployment.

90. Does inflation always cause workers losses due to decreases in real wages? Why or why not?
Review-exam#1
Answer Section

TRUE/FALSE

1. ANS: T TOP: Ideas for Beyond the Final Exam
2. ANS: F TOP: Ideas for Beyond the Final Exam
3. ANS: T TOP: Ideas for Beyond the Final Exam
4. ANS: T TOP: The American Economy: A Thumbnail Sketch
5. ANS: F TOP: The American Economy: A Thumbnail Sketch
7. ANS: T TOP: Scarcity, Choice, and Opportunity Cost;
8. ANS: F TOP: Scarcity, Choice, and Opportunity Cost;
9. ANS: T TOP: Scarcity and Choice for the Entire Society
10. ANS: F TOP: Specialization Fosters Efficient Resource Allocation
11. ANS: F TOP: Markets, Prices, and the Three Coordination Tasks;
12. ANS: F TOP: Last Word: Don't Confuse Ends With Means

MULTIPLE CHOICE

13. ANS: D TOP: Ideas for Beyond the Final Exam
14. ANS: A TOP: Ideas for Beyond the Final Exam
15. ANS: D TOP: Ideas for Beyond the Final Exam
16. ANS: B TOP: Ideas for Beyond the Final Exam
17. ANS: B TOP: Ideas for Beyond the Final Exam
18. ANS: E TOP: Inside the Economist's Tool Kit
22. ANS: D TOP: The American Economy: A Thumbnail Sketch
23. ANS: A TOP: The Inputs: Labor and Capital
24. ANS: C TOP: The Inputs: Labor and Capital
25. ANS: B TOP: The Inputs: Labor and Capital
26. ANS: E TOP: Scarcity, Choice, and Opportunity Cost;
27. ANS: B TOP: Scarcity, Choice, and Opportunity Cost;
28. ANS: E TOP: Scarcity, Choice, and Opportunity Cost;
29. ANS: D TOP: Scarcity, Choice, and Opportunity Cost;
30. ANS: B TOP: Scarcity and Choice for a Single Firm
31. ANS: A TOP: Scarcity and Choice for a Single Firm
32. ANS: E TOP: Scarcity and Choice for a Single Firm
33. ANS: B TOP: Scarcity and Choice for a Single Firm
34. ANS: C TOP: Scarcity and Choice for a Single Firm
35. ANS: B TOP: Scarcity and Choice for the Entire Society
36. ANS: C TOP: Scarcity and Choice for the Entire Society
37. ANS: D TOP: The Concept of Efficiency
38. ANS: E TOP: Demand and Quantity Demanded
39. ANS: A TOP: Demand and Quantity Demanded
ECONOMISTS describe human behavior, which cannot be predicted as accurately as physical or chemical reactions. Waffling can be found at the frontiers of all sciences, but the media pay more attention to economic debates, such as the effect of supply-side tax cuts on tax revenues, than to the debates of physicists (are quarks the smallest particle of matter?) or chemists. Value judgments also play a larger role in economic debates, since economics often deals with matters that directly affect the welfare of large numbers of people.

The statistician confused correlation with causation. The doctors were not the cause of the smallpox deaths. If the statistician were correct, then we should get rid of hospitals, since so many people die there. One cannot conclude that the army doctors could have helped thirty years later; this would require additional data comparing smallpox deaths with and without medical assistance.
76. ANS:
Sheer size of the country, with a population of over 290 million and a labor force of 140 million, contributes to the large production. But this cannot be the only element, or India's GDP would be three times as large. Efficiency is the second factor the U.S. economic system transforms inputs into output in a much more productive fashion. U.S. success is attributable to the free enterprise market system.

What makes the U.S. economy unique is its combination of prosperity and population. While there are several countries that are rich in terms of per capita GDP, they are relatively small because of their small population and geographic size. Other countries have immense populations, but have not achieved economic prosperity in terms of per capita GDP.

77. ANS:
GDP growth includes the effects of inflation and population growth, meaning there are more labor inputs in the economy. The standard of living is better measured by real GDP per capita. To obtain the standard of living from GDP, one must correct for the effect of population growth.

78. ANS:
5. Government as redistributor. Example: poverty programs, social security.

79. ANS:
One method is to override the market distribution to force a more equal distribution of incomes. A second method, that is used to varying degrees in virtually all of the private-enterprise economies, is to use transfer payments, sums of money that individuals receive from the government without providing any goods or services in return. By taxing wealthier individuals and giving transfer payments to poorer individuals, a more equal distribution of after-tax income may be achieved.

80. ANS:

a. *Resources* are the instruments provided by nature or by people that are used to create goods and services that humans want. They are scarce, and include raw materials, labor, and capital.
b. A *rational decision* is one that best serves the objective of the decision maker. The use of the word rational does not indicate approval or disapproval of the objective.
c. *Scarcity* is the general fact that humanity has less of resources and things than we would like. Scarcity leads to the need for rational decisions regarding economic resources.
d. The *opportunity cost* of any decision is the forgone value of the next best alternative that is not chosen. Scarcity imposes the need to compute opportunity cost.
e. *Economic growth* occurs when an economy is able to produce more goods and services for each consumer. It usually requires investment (less current consumption) to increase or maintain economic growth.

81. ANS:
Every decision by government has an opportunity cost, as would any decision made by consumers or businesses. One would have to determine the best forgone alternative, be it national defense, a space station, the Superconducting Super Collider, the environment, or a tax cut. Each of these has a "value," even if it is hard to put a price tag on it. Clearly, determining the opportunity cost of such a complex decision is not easy in practice.

82. ANS:
Money price can be higher than opportunity cost if the good or service has no alternative use. An example might be hiring unemployed persons to perform labor. Because the next best use of the labor has zero monetary value, the money cost of the task is above the opportunity cost. The opportunity cost can be higher than the money price if one ignores implicit costs, e.g., time, in computing cost. One example is the opportunity cost of attending college.

83. ANS:
In a market economy, there is profit to be made by meeting peoples' needs in the marketplace. There is profit for the sellers of oranges if they can get them to market in South Dakota, and consequently they expend the time and money to get them there. The profit motive causes goods and services to be provided in a market economy.

84. ANS:
Effective price ceilings (i.e., price ceilings set below the equilibrium price) will cause a chronic shortage of the goods, leading to black markets, greater profits for illicit suppliers, and (probably) higher prices than would exist in a free market. Additionally, the quantities supplied of these goods will be lower than in a free market, making people worse off than they otherwise would be.

85. ANS:
Gross Domestic Product is an aggregate and therefore an abstraction. It is the sum of the money values of all final goods and services produced in the domestic economy during a specific time period, usually a calendar quarter or year. GDP excludes goods and services produced in another quarter or year and it excludes intermediate goods and services. It includes final goods and services produced in the United States, regardless of the ownership of the facility producing the goods or services. It excludes goods and services produced outside the United States, even if they are produced by subsidiaries or branches of U.S. firms. GDP includes only goods and services that are bought and sold in organized markets. Examples of items included in GDP are anything newly produced in the specified time period. It is important that the item be produced in the period and not "new" items that may have been in storage or inventory for a long time before being sold. Items excluded from GDP are any intermediate good or service, any used good, any good or service produced outside the United States, and any good or service that does not pass through an organized market.

86. ANS:
a. This is not included in GDP. No good or service has been produced.
b. Included.
c. Included.
d. Not included. Produced in a previous year.
e. Not included. Does not pass through an organized market; would be considered "household production."
f. Not included. "Household production."
g. The air travel, if on a U.S. airline, would be included. If the travel is on a foreign carrier, it would not be included. The wine and cheese would not be included.

87. ANS:
Real GDP (or GDP in constant dollars) is a measure of the output of final goods and services produced in the domestic economy during a specific time period. It measures output in dollars of constant value. Therefore, it corrects for the effects of inflation. Real GDP will increase if there is an increase in the actual output of goods and services, such as more automobiles, more computers, more Internet access time, or more new economic textbooks. Nominal GDP (or GDP in current dollars, or money GDP) is a measure of output of final goods and services at current prices produced in the domestic economy during a specific time period. It measures final sales using dollars of current (non-inflation corrected) spending power. It can increase because of an increase in real output or because of an increase in the prices of final goods and services. Economists use real GDP as a more accurate measure of the true state of the economy, in that it tells us whether there are more or fewer actual final goods and services in the economy. Nominal GDP can be misleading in this regard. An example of this is the case of stagflation; rising prices, combined with falling output of final goods and services, may result in rising nominal GDP and falling real GDP. The decrease in real GDP is a better indicator of the sluggish economy.

88. ANS:
Decreasing the length of the workweek, other things being equal, should decrease potential GDP. As Americans enjoy longer leisure hours and shorter work hours, the goods and services such work would produce will decrease. The United States could increase the amount of potential GDP that the economy produces if Americans would decide to work longer hours or more days per week. This would not necessarily mean that Americans would be better off since, obviously, the benefits and pleasures of some leisure time would be foregone. The main reason that the amount of final goods and services enjoyed by Americans has not decreased even with shorter work hours is that labor productivity has increased. Since labor productivity measures output per hour worked, it does not automatically decrease as the total number of hours worked decreases. In fact, during the twentieth century, labor productivity in the United States has increased significantly. This has occurred mainly due to technical progress and the increasing education and skill levels of the American worker.

89. ANS:
The unemployment rate is a percentage obtained by dividing the number of persons classified as unemployed by the number of persons in the labor force. Unemployed persons are those individuals who are out of work and actively looking for work. The labor force is the sum of those counted as unemployed and those persons counted as employed. Employed persons are those at work, full- or part-time, during the week in which the employment survey data are collected by the Department of Labor.

The three principal types of unemployment are frictional, structural, and cyclical unemployment. Frictional unemployment occurs when persons are between jobs. Workers may be between jobs because they have quit one job and are searching for something more suitable, or because they are moving to a different region of the country, or they are moving from a declining industry to a growing industry. Structural unemployment is sometimes referred to as long-term unemployment or technological unemployment. Structurally unemployed workers have skills that are outdated or were working in jobs that are now done by some type of automated machinery. These unemployed workers may need retraining or additional education to prepare themselves for new careers. Structural unemployment is particularly difficult for older workers who may not have sufficient time to learn new skills before they reach retirement age. Cyclical unemployment is often referred to as a recession unemployment and is a focus of macroeconomic theory. Cyclical unemployment is created when the economy is not producing at its potential level of GDP. Government aggregate demand management policies are often effective in reducing cyclical unemployment.

90. ANS:
During most inflationary periods, all prices are rising, even wages, which are the prices of labor. Workers often assume that inflation is "robbing" them of income when, in fact, as prices go up, wages usually rise faster. Data from the U.S. economy reveal that wages and prices have been climbing together throughout most of the twentieth century. Real wages have risen rather steadily since the rise in nominal wage levels has exceeded the increase in price levels. This process has occurred whether inflation rates have been high or low. Real wages have fallen during certain short-term periods, notable during the 1980s, but this was not a period of very high inflation. Real wages generally rise because of increases in labor productivity and are not significantly affected by inflation.